

Date: Monday, 6/2/2008 8:27:23 AM
 User: David Duval

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : AFT GUIDE PLATE
 Job Number : 05015
 Estimate Number : 13356
 P.O. Number :
 This Issue : 6/2/2008 S.O. No. :
 Prsht Rev. : NC Part Number : D358919
 First Issue : // Type : R & D SM/MED FAB Drawing Number : D3589 PROTO 08.06.03
 Previous Run : Project Number : VR0004
 Written By : M08/06/02 Drawing Revision : PROTO
 Checked & Approved By : Material :
 Comment : Est Rev:A 08-05-30 new issue DD verified by:ec Due Date : 6/9/2008 Qty: 1 Um: Each

Additional Product

PROTOTYPE

Job Number:



FOR ENGINEERING USE ONLY

Seq. #: Machine Or Operation: Description :

1.0 M4130NS063 4130 Sheet .063



Comment: Qty.: 0.0149 sf(s)/Unit Total: 0.0149 sf(s)
 4130 Sheet .063 M16443 M103433
 batch: 16443 IB 8-6-2

2.0 WATER JET FLOW WATER JET



Comment: FLOW WATER JET
 1-Cut as per Dwg D3589
 Dwg Rev: PROTO
 Prog Rev: PROTO

IB 8-6-2

①

2-Deburr if necessary

IB 8-6-2

3.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE



IB 8-6-2

Comment: INSPECT PARTS AS THEY COME OFF MACHINE

4.0 QC8 SECOND CHECK

ENGINEERING
APPROVAL

08.06.02 ①

Comment: SECOND CHECK

5.0 PACKAGING 1 PACKAGING RESOURCE #1



FOR ENGINEERING USE ONLY



Comment: PACKAGING RESOURCE #1
 Identify and Stock
 Location: _____

M08/06/02 ①

→ 4.1 Bend as per dwg D3589

M08/06/02 ①

ENGINEERING
APPROVAL

08.06.02

①

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User: David Duval

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: AFT GUIDE PLATE

Job Number: 05015

Part Number: D358919

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

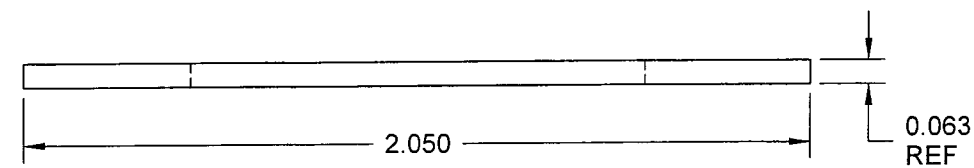
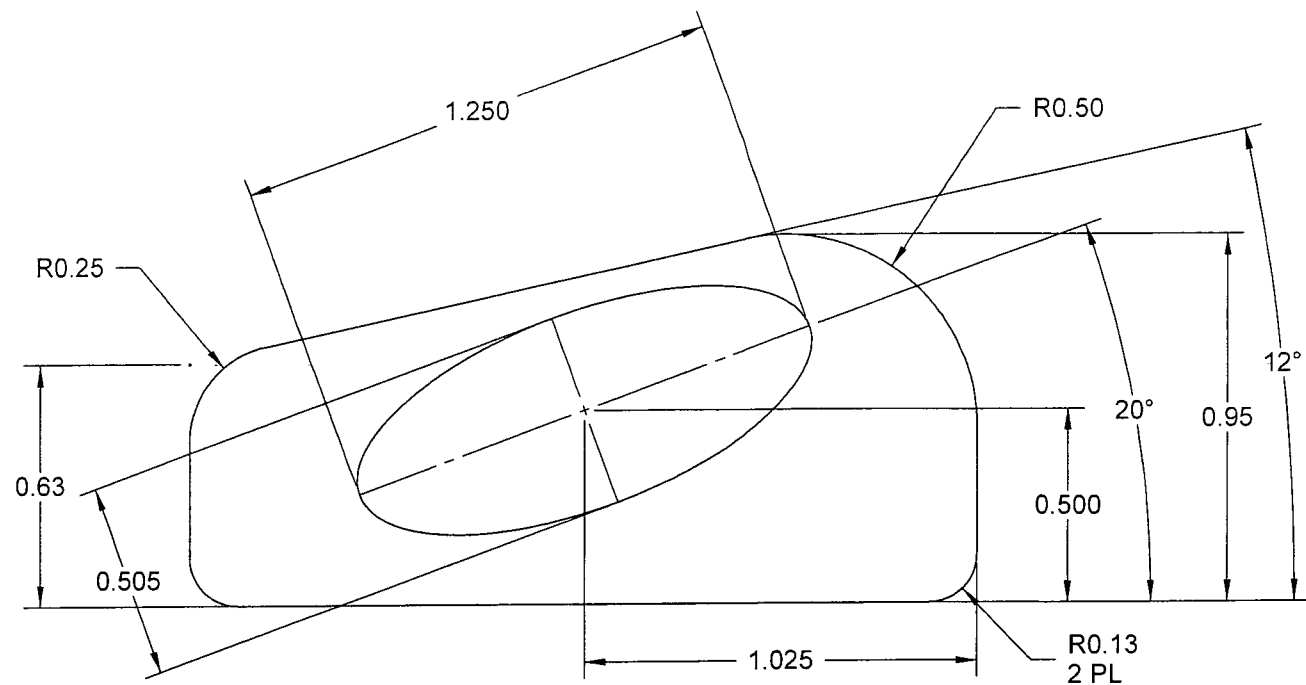
08.06.05 Prototype

Job Completion

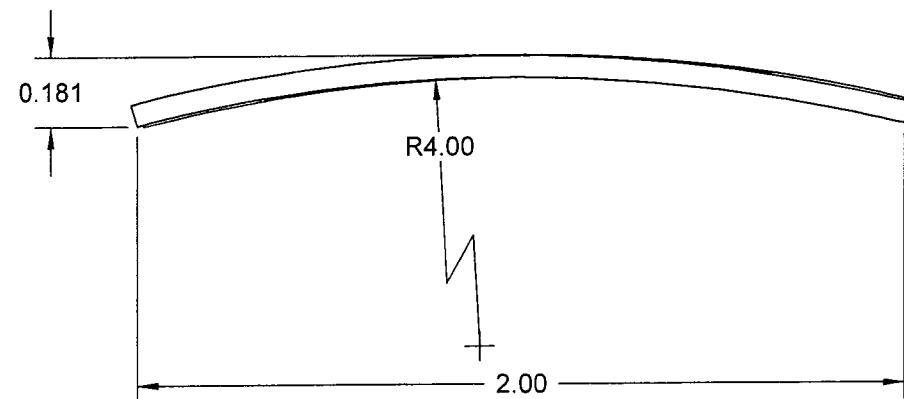


charge to W/O # 00224

mf 08-06-16



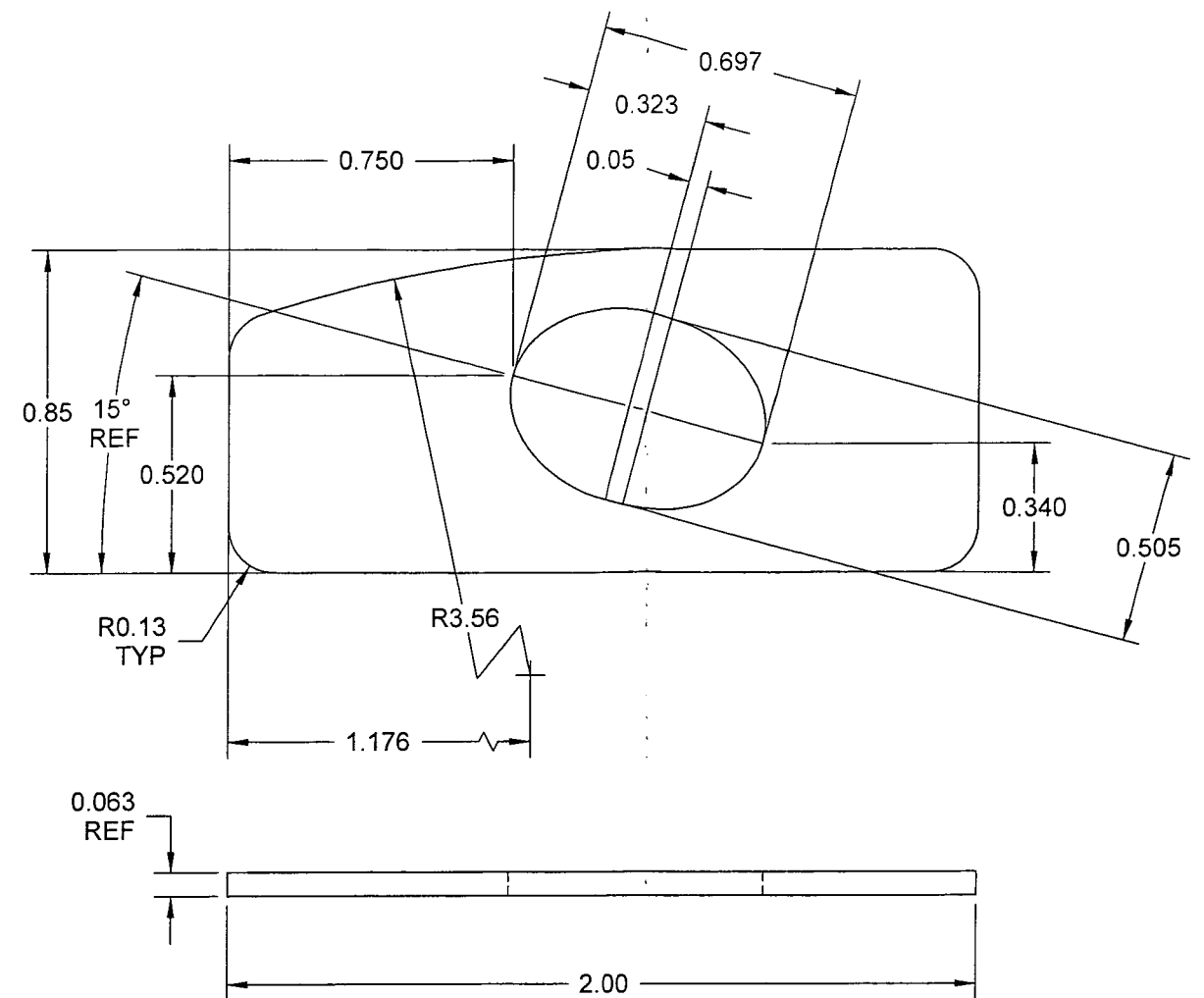
**D3589-19F AFT GUIDE PLATE
FLAT PATTERN**



**D3589-19 AFT GUIDE PLATE
MAKE FROM D3589-19F**

D3589-15F/-15/-17 NOTES:

- 1) MATERIAL: AISI 4130 SHEET 0.063 THICK PER MIL-S-18729/AMS6350/AMS6351
NORMALIZED (REF. DART SPEC M4130N-S063)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.02 lbs EACH



D3589-17 FORWARD GUIDE PLATE

PROTOTYPE
PLEASE RETURN ALL ISSUED
DATA TO ENGINEERING
08.06.02

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN		
CHECKED		DRAWING NO. REV. A
MFG. APPR.		D3589 SHEET 7 OF 7
APPROVED		TITLE SCALE
DE APPR.		LATCH ASSEMBLY NTS
DATE	08.05.29	COPYRIGHT © 2008 BY DART AEROSPACE LTD
		THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

Receiving Report

Date: 7/2/06
Supplier: Chant

Batch No: M102433
Dart P/O: 2943

Packing Slip: Yes ☒ No ☐
Invoice: Yes ☒ No ☐
Receipt: Cash ☐ Cr ☒

Release Note Attached: Yes ☒ No ☐
Waybill Attached: Yes ☒ No ☐
Shipment Complete: Yes ☒ No ☐
QC6 Inspection 36 07.03.06
Work Order

Discrepancies		Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments
Part Number							
M30451264			32	0	0	32	
M4130ntv375w065			20	20.5	0	0.5	
M4132nt1000w099			20	19	0	1	

Initials of receiver (if shipment OK) Level 12
over 2 hours

Location ED

Production/Admin: 07/02/07
Date
Received/Costing RIP 3706
Initial 18

450 377-4248
450 377-5696

MONTRÉAL : 514 336-4248
FAX : 514 336-4246

DISTRIBUTEUR D'ACIER ET MÉTAUX SPÉCIALISÉS
STEEL AND SPECIALTY METALS DISTRIBUTOR

ONTARIO : 1 800 667-4248
FAX : 1 866 456-4242

On a du Savoir "FER"

2 A / SHIP TO:

ED FEB 15 2007

EROSPACE
BERDEEN STREET
BURY,
J
7

FACTURE INVOICE	N°	170263
DATE	06/02/07	
BON DE LIVRAISON PACKING SLIP	N°	117635
DATE DE LIVRAISON DELIVERY DATE	06/02/07	
TERMES / TERMS	TERR.	PAGE N°
NET 30 JOURS	2F	001

DESCRIPTION	POIDS WEIGHT	PRIX PRICE	PAR PER *	MONTANT AMOUNT
ROUND	11	16.800		200.26
3/8 X .065	22	5.750		129.30
1/2 X .058	20	5.750		115.98
" X .049	19	6.050		114.95
16" X 144 SHEET	1	350.000		350.00
16" X 144 SHEET	1	555.000		555.00
X 6	72	350.000	CLB	252.00
X 3/4	5	440.000	CLB	22.00
12 JA 48 X 96	0	448.435	CLB	0.00
RCHARGE	1	0.000	UN	0.00
POIDS TOTAL TOTAL WEIGHT		153.59		

Formplus N° 8619

TERIALS REMAIN THE PROPERTY OF "ACIER CAMP INC." UNTIL PAYMENT IS MADE IN FULL, COMPLETE AND CASHED.
THE BUYER'S EXPENSE. • ALL MATERIALS BEAR THE SAME WARRANTY AS GIVEN BY THE MANUFACTURER.
TO RESPECT THE FOLLOWING CONDITIONS: NET 30 DAYS FROM BILLING DATE AND THE BUYER ACCEPTS TO PAY
2% PER MONTH OR 24% PER ANNUM ON ALL PAST DUE ACCOUNTS OVER 30 DAYS. • ANY DEFAULT IN RESPECT WITH
PAYMENT BY ACCELERATION AND PERMITS TO THE SELLER, AT HIS CHOICE TO CLAIM FOR THE BALANCE DUE OR THE
SOLD. • ANY CLAIM MUST BE MADE WITHIN FIVE DAYS WITH THIS DOCUMENT ENCLOSED. • ANY MERCHANDISE
UT OR MODIFIED CANNOT BE RETURNED. • ALL GOODS RETURNED MUST BE WITH OUR AUTHORIZATION AND ARE
CHARGE.

EN BONNE CONDITION MERCHANDISE RECEIVED IN GOOD CONDITION

A/Y M/M J/D

SOUS-TOTAL SUB TOTAL	1739.57
T.P.S. G.S.T.	104.38
T.V.Q. Q.S.T.	0.00

20-06-03 03 FROM-

Duferco

C O R P O R A T I O N

METALLURGICAL TESTING LABORATORY
15 ROEMER BLVD.
FARRELL, PA 16121
CONTACT: DALE SIDMONS
TELEPHONE: (724) 983-6464 X298
FAX: (724) 982-4423

CERTIFIED TEST REPORT

Customer: A.M. CASTLE & CO. ORDER # 709743-01 CUST. PO# 01-17802
Address: 3400N. WOLF ROAD SIZE .063 X 36.000
FRANKLIN PARK, IL WT. SHIPPED 29340
Phone: 847-349-2345 HEAT # MTRA11779
Fax: 847-4558824 GRADE/TYPE 4130AQ (NORMALIZED OR OTHERWISE HEAT TREATED)
Representative: SHARON URBANEK Testing Required: HARDNESS, YIELD, TENSILE, ELONG, GRAIN SIZE / AMS6345A/AMS2301 (MIL-S-18729)

As Processed Results				B8						
ASTM TEST METHOD				Yield PSI	Ultimate PSI	Elong 2%	Hardness HRB	Bend Test 1T-NW	E-45 Baking 100X	E112 Grain Size 100X
Coil #	Heat #	Gauge	Area							
8004426	MTRA11779	.063	.0315	93250	105970	13.5	99	PASS	0	0

Heat Treated Results			E18
ASTM TEST METHOD			Hardness HRC
Coil #	Heat #	GA	
8004426	MTRA11779	.063	38

*Denotes outsourced to independent laboratory (A2LA Certified)

Hardness Test Per ASTM E-18	
	Average
Surface (HRA)	74.9
Core (HRA)	74.7

Requirement: The difference in hardness between the surface and core shall not be greater than 2.0

CONFORMANCE: The sample submitted has passed all testing requirements.

By: [Signature] Date: 9-12-06
Metallurgical Laboratory Supervisor

The information in this report is derived exclusively from material tested and the information and/or specifications furnished to Duferco Farrell Corp. by the customer and excludes any expressed or implied warranties as to the fitness of the material tested or analyzed for any particular use.
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Form Number: LQC 5.10.4 Rev. 1 05/18/04

Duferco

C O R P O R A T I O N

METALLURGICAL TESTING LABORATORY
15 ROEMER BLVD.
FARRELL, PA 16121
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TELEPHONE: (724) 983-6464 X298
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CERTIFIED TEST REPORT

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Address: 3400N. WOLF ROAD SIZE .063 X 36.000
FRANKLIN PARK, IL WT SHIPPED 29340
HEAT # MTRA11779
Phone: 847-349-2345 GRADE 4130AQ
Fax: 847-455-8824
Representative: SHARON URBANEK

Heat Analysis # MTRA11779					(Results are in weight %)				
ASTM TEST METHOD: B415 <input type="checkbox"/> or E1019 <input type="checkbox"/> (C & S only when checked)									
C	Mn	P	S	Al	Si	Cu	Ni	Cr	Mo
.32	.50	.006	.001	.031	.24	.02	.02	.56	.16
Sn	Ca	B	Nb	Co	V	Zr	Ce	N	Ti

NOTE: The melt source is USA

- The material supplied is mercury and weld free
- Frequency/severity rating - passed based on Frequency/severity per spec AMS 2301

By: 

Metallurgical Laboratory Supervisor

Date: 9-7-06

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Form Number: LQCP 5.104 Rev. 1 05/18/04